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Fall 2010, Intermediate Macroeconomics, section 4

ECON 2202 Quiz IV

General recommendations:

- Read questions thoroughly.
- Work individually.There are two pages.
- Please respond on this copy.
- You have 20 minutes. Good luck!

Your name:

- 1. Circle the appropriate answer on each of the following items. Circle multiple items if necessary:
 - (a) Which of these stylized facts is (are) replicated in the Solow growth model with technology growth at the steady-state? 1) people migrate from poor to rich countries; 2) there is sustained growth in output; 3) capital per worker is steady; 4) higher population growth leads to lower output per capita.
 - (b) The following are implications of the standard Solow growth model: 1) poor countries always remain poor; 2) eventually, all countries grow at the same rate; 3) population hits a limit; 4) the savings share increases with income.
 - (c) If the depreciation rate increases in the Solow growth model, steady-state:
 1) population grows more slowly;
 2) capital per person is unchanged;
 3) consumption per capita is lower;
 4) the savings rate increases.
 - (d) In the endogenous growth model with human capital, what can increase the growth rate of the economy? 1) spending more time on production; 2) spending more time on education; 3) increasing the population growth rate; 4) increasing the savings rate.
- 2. Describe what happens in the short and the long run when time dedicated to education is increased in the human capital model of endogenous growth.

3. Explain what the critical assumptions are that lead to convergence in the Solow growth model.

4. Explain why there can be sustained growth in the standard of living in the Solow growth model.

5. What condition needs to be satisfied to maximize steady-state consumption in the Solow growth model. Explain.

Bonus question: It has been observed that modern economies with higher per capita incomes tend to have lower fertility. What are the consequences of including this into the Solow growth model.